Weekly Report for the week ending Mar. 29, 2001

\*\*\* CALORIMETER (N. Johnson)

## 4. 1. 5. 1 CAL Management

Investigated impact of reduction in CAL funding for FY02. Attempted to determine impact of new funding profile on delivery of CAL modules to SLAC. Reported results to IP0.

Conducted Level III performance spec review for the CAL subsystem. No significant problems were identified and agreement was achieved on several minor corrections, deletions and/or additions.

Completed final modifications to accepted paper on BTEM CAL development to be published in IEEE TNS.

Continued definition of CAL schedule and WBS. Update of WBS Dictionary is ongoing.

France

D.B.+als Work financial analysis of the French Budget of 2001 and 2002. Y.A.& D.B. WBS proposition

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### 4. 1. 5. 3 Performance Assurance

Gave video presentation on the Parts Program Control Plan.
Responded to survey questionnaires about the Parts Program Control Plan.
Work in process to resolve issues related to high voltage capacitors and poly-silicon fuses.
Met with Darryl Lakins at GSFC to discuss GLAST LAT Parts Program.
Working with Jim Ampe to resolve issues about Kapton Cables.
Preparing various procedural documents required for GLAST LAT.

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# 4. 1. 5. 4 CAL Design

Engineering drawing of the structure is going on. New drawing produced. Tooling engineering drawing in Progress (Mechanical Engineering group Ecole Polytechnique)

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## 4. 1. 5. 5. 2 CAL CsI Scintillation Crystal

Meetings with potential crystal vendor were held in Stockholm on Wednesday and Thursday. Negotiations on specification details were successfully concluded and slight modifications to the specification were proposed. Schedule and interface issues have been agreed upon. The objective is to sign the contract on April 9th. First crystals should arrive around May 1st. (for Per/Leif)

CsI Crystal Optical Test Stations: (Phlips, Grove)
Test stations are assembled and (nearly) light-tight. Pulses put into ADCs can now be read out of DAQ board. LabView acquisition and control software is well under way.

Works on the cosmic bench is in progress (Philippe Bourgeois, Yves Piret) Data analysis is ongoing (F.X. Gentit)

#### 4. 1. 5. 5. 3 PIN Photodi ode

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More teleconferences with international partners trying to find a way to initiate PIN photodiode procurement for VM2 and EM development. French commitment depends on future approval by CNES - available funding is 1/3 of needed funding in France.

Started testing of crystal light yield test box and associated electronics and software
Improved thermal testing facility for epoxy tests and all future tests
Continued writing on crystal test box documentation
Continued working on I&T committee issues

Samples of different kapton connectors ask at Molex, and 24 pieces of one kind delivered (Ref 522 71 0790) (P. Bourgeois) Soldering flex on PIN: possible way of soldering but interference with the flex concept (Jacky).

PIN Bonding

Activity devoted to technical discussion with CETIM. A test plan is in discussion with CETIM and other company. (Gilles, Claude Chapron, Didier Imbault). God results for the bonding test with the glue DC 93-500 (Serge Herve) Transparency measurements of the masterbond glue (Remy Chipaux).

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### 4. 1. 5. 6 CAL Pre Electronics Module

**Facilities** 

Integration facilities evaluation at Ecole Polytechnique in progress

PEM integration: GSE

Completed report on a new hodoscope for VM2 and also after for the PEM test bench with different options (including cost estimation). A general specifications document is in preparation for the PEM bench ( Pierre Prat, Gilles)

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# 4.1.5.7 CAL Analog Front End Electronics

Began revisions on GCFE design document to reflect as-built concept.

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# 4. 1. E. 3 CAL Balloon Flight

The electronic calibration collected with Rev. D TEM last week used the standard command files we delivered with the BFEM, rather than the upgrades we sent a couple months ago. The data are fine and analyzable, but with the upgraded commands, the analysis will be simplified and more consistent with a future flight process. We've asked for another calibration, using the upgrades, prior to shipment to GSFC. (Grove)

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### 4. 1. 5. 4. 5 CAL Software/Design Verification

The flexibility to choose calorimeter geometry (flight or beamtest) has been added to the CAL event reconstruction. Debugging in progress. (Chekhtman). Inconsistency in module numbering in ModuleId class corrected (Chekhtman). Sent a new, high-level geometry description consistent with the carbon-cell mechanical design to SLAC (Grove). A more detailed description is in progess.

FW Weekly Report for the week ending Mar. 29 2001. txt Simulations to study a CAL-HI trigger configuration have begun (Grove).
Cal Digi and crystal ID classes are complete (Grove).